UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Niazi Licensing Corporation,

Plaintiff,

v.

St. Jude Medical S.C., Inc.,

Defendant.

Case No. 17-cv-5096 (WMW/BRT)

ORDER

Plaintiff Niazi Licensing Corporation (NLC) and Defendant St. Jude Medical S.C., Inc. (St. Jude), cross-move to exclude expert testimony. (Dkts. 164, 196.) For the reasons addressed below, NLC's motion to exclude Dr. Arthur Erdman is denied, St. Jude's motion to exclude Dr. Martin Burke is denied, St. Jude's motion exclude Brad Carlson is granted in part and denied in part, and St. Jude's improper request for reconsideration is denied.

BACKGROUND

NLC owns United States Patent No. 6,638,268 (the '268 Patent), which issued on October 28, 2003. The '268 Patent is directed to a catheter system that can be inserted into the coronary sinus of the heart. This catheter system allows medical professionals to administer fluids and introduce pacing leads to the coronary sinus. Although the use of catheters in general was well established by 2003, the '268 Patent describes an invention that, based on its structure and shape, purportedly is better suited for "use in the coronary sinus, especially in patients suffering from congestive heart failure." The '268 Patent

claims a double catheter system with an "outer, resilient catheter having shape memory and a hook-shaped distal end" and an "inner, pliable catheter slidably disposed in the outer catheter." The '268 Patent also claims methods of using the catheter system.

NLC initiated this patent infringement lawsuit against St. Jude on November 13, 2017. NLC alleges that St. Jude infringed the '268 Patent either literally or through the doctrine of equivalents. According to NLC, St. Jude directly infringes the '268 Patent by using, manufacturing, selling, or offering to sell infringing catheter systems. NLC also alleges that St. Jude indirectly infringes the '268 Patent by inducing its customers—namely, medical professionals—to infringe the '268 Patent.

The '268 Patent includes 27 claims, some of which are directed to configurations of the catheter and some of which are directed to the method of using the catheter system. NLC alleges that St. Jude infringes independent Claims 1, 11, 13, 18 and 24 and dependent Claims 10, 14, 15, 19, 23, 25, 26, and 27. The Court determined that Claims 1, 13, 18, and 24 are invalid as indefinite and that because Claims 10, 14, 15, 19, 23, 25, 26, and 27 depend on Claims 1, 13, 18, and 24, they also are indefinite. Only a single method claim remains: Claim 11, which relates to a series of steps for "using a double catheter." On October 21, 2019, the Court issued a claim construction order as to Claim 11, construing "the catheter" to mean "the double catheter" and concluding that "Claim 11 is infringed only when the steps are performed in the order listed."

On November 4, 2019, St. Jude moved to strike facts disclosed in the expert reports of NLC's technical expert, Dr. Martin Burke, and NLC's damages expert, Brad Carlson, because those facts were not disclosed before the fact-discovery deadline. On

December 2, 2019, United States Magistrate Judge Becky R. Thorson granted St. Jude's motion to strike. NLC appealed, and the Court affirmed the magistrate judge's December 2, 2019 Order. Currently pending before the Court are NLC's motion to exclude the expert testimony of St. Jude's technical expert Dr. Arthur Erdman and St. Jude's motion to exclude the expert testimony of NLC's experts Dr. Burke and Carlson.

ANALYSIS

The admissibility of expert testimony is a question of law for the district court that is governed by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Rule 702 provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
> (b) the testimony is based on sufficient facts or data;
> (c) the testimony is the product of reliable principles and methods; and
> (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. "An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted." Fed. R. Evid. 703.

The proponent of expert testimony must prove its admissibility by a preponderance of the evidence. *Lauzon v. Senco Prods., Inc.*, 270 F.3d 681, 686 (8th Cir.

2001). "Rule 702 reflects an attempt to liberalize the rules governing the admission of expert testimony" and favors admissibility over exclusion. *Id.* (internal quotation marks omitted). Determinations as to the admissibility of expert testimony are within the district court's discretion. *See Arkwright Mut. Ins. Co. v. Gwinner Oil, Inc.*, 125 F.3d 1176, 1182 (8th Cir. 1997) (reviewing for an abuse of discretion).

It is a district court's obligation to ensure that testimony admitted under Rule 702 "is not only relevant, but [also] reliable." *Daubert*, 509 U.S. at 589. When determining reliability, a district court evaluates the expert's method as to (1) whether the method can be (and has been) tested, (2) whether the theory or technique has been subjected to peer review and publication, (3) the method's known or potential rate of error, and (4) the method's general acceptance. *Presley v. Lakewood Eng'g & Mfg. Co.*, 553 F.3d 638, 643 (8th Cir. 2009) (citing *Daubert*, 509 U.S. at 593–94). These factors are not exhaustive, and the district court must evaluate the reliability of expert testimony based on the facts of the case. *Id.* A district court also may consider "whether the expertise was developed for litigation or naturally flowed from the expert's research; whether the proposed expert ruled out other alternative explanations; and whether the proposed expert sufficiently connected the proposed testimony with the facts of the case." *Sappington v. Skyjack, Inc.*, 512 F.3d 440, 449 (8th Cir. 2008) (internal quotation marks omitted). When weighing these factors, the district court functions as a gatekeeper to separate "expert opinion evidence based on 'good grounds' from subjective speculation that masquerades as scientific knowledge." *Glastetter v. Novartis Pharm. Corp.*, 252 F.3d 986, 989 (8th Cir. 2001).

Questions regarding the factual basis of an expert's testimony ordinarily, however, are issues of credibility of the expert's testimony, not issues of admissibility. *Sappington*, 512 F.3d at 450; *see also Minn. Supply Co. v Raymond Corp.*, 472 F.3d 524, 544 (8th Cir. 2006). "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596.

I. NLC's Motion to Exclude Expert Testimony of Dr. Erdman

NLC moves to exclude the testimony of St. Jude's technical expert, Dr. Erdman. NLC argues that Dr. Erdman does not qualify as an expert under Rule 702 because he is not a medical doctor or electrophysiologist and, therefore, he is unable to testify regarding the medical procedure of implanting permanent pacing leads in a lateral branch of a coronary sinus. NLC also contends that permitting Dr. Erdman to present testimony on the issues of invalidity and non-infringement will unfairly prejudice NLC. St. Jude counters that Dr. Erdman will testify regarding the engineering aspects of non-infringement and invalidity, Dr. Erdman has skill in the art, and his testimony is offered in conjunction with Dr. David Benditt, an electrophysiologist. Moreover, St. Jude contends, NLC fails to challenge any aspect of Dr. Erdman's experience or any specific qualification or opinion of Dr. Erdman.

Rule 702 requires an expert to possess "knowledge, skill, experience, training or education sufficient to assist the trier of fact." *Robinson v. GEICO Gen. Ins. Co.*, 447 F.3d 1096, 1100 (8th Cir. 2006) (internal quotation marks omitted); *accord* Fed. R. Evid. 702. And such knowledge, skill, experience, training, or education must match "the

subject matter of the witness's testimony." *Robinson*, 447 F.3d at 1101. When issues of infringement and invalidity are disputed, courts analyze them from the perspective of a person having ordinary skill in the art. *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1361 (Fed. Cir. 2008). To opine on those issues that require the examination of evidence from the perspective of one of ordinary skill in the art, a witness must qualify as an expert in the pertinent art. *Id*. at 1363. There also must be an "adequate relationship between [the expert's] experience and the claimed invention." *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1373 (Fed. Cir. 2010) (distinguishing *Sundance* and holding that the proffered expert had the "knowledge, skill, experience, training, [and] education" of a "specialized" nature that was likely to "assist the trier of fact to understand the evidence or to determine" infringement for the purposes of Rule 702 (internal quotation marks omitted)).[1] Any gap in an expert witness's qualifications or knowledge generally pertains to the weight of the testimony, not its admissibility. *Robinson*, 447 F.3d at 1100.

St. Jude offers Dr. Erdman as a technical expert who will opine on the engineering aspects of non-infringement, invalidity, and the "specific aspects of the properties of the materials required to perform claim 11" of the '268 Patent. The parties agree that the disputed technology at issue, a catheter delivery system, involves design principals that are driven by the expertise of an engineer. Dr. Erdman's qualifications include a Ph.D. in

[1] *See also Birchwood Labs., Inc. v. Battenfeld Techs., Inc.*, No. 09-3555, 2012 WL 2045757, at *8 (D. Minn. May 21, 2012) (concluding that printing expert's testimony was relevant to the field of art when the patent-in-suit claimed firearm shooting targets because "[t]he general field of printing is not the whole field of relevant prior art, but printing is an important aspect of the relevant field of printed shooting targets").

mechanical engineering. He is the Director of the University of Minnesota's Medical Devices Center, serves as the Richard C. Jordan Professor and is a Morse Alumni Distinguished Teaching Professor of mechanical engineering at the University of Minnesota. Dr. Erdman has 45 years of experience in mechanical design, bioengineering, and medical device and product design, including catheter design. His credentials demonstrate that he possesses knowledge, skill, experience, training, and education sufficient to assist the trier of fact. Moreover, Dr. Erdman's education, experience, and training match the subject matter of his testimony.

NLC argues that Dr. Erdman is not qualified in the pertinent art. This argument, however, contradicts NLC's position as to who, in this instance, would be a person of ordinary skill in the art (POSITA). Even when parties attempt to narrowly construe who constitutes a POSITA, courts construe a POSITA broadly to account for a wide variety of expertise, experiences, and avenues of relevant knowledge acquired. *See, e.g.*, *Merck Sharp & Dohme Pharm. v. Teva Pharm. USA, Inc.*, No. 07-1596 (GEB)(DEA), 2009 WL 3153316, at *46 (D.N.J. Aug. 19, 2009) (defining POSITA as "one with substantial training in the chemical and biological sciences with an advanced degree in chemistry, training in the areas of synthetic organic chemistry and medicinal chemistry, and who has substantial experience working in the research and development of leukotriene antagonists *or* who understands the prior art references and [has] the capacity to draw inferences from them, individually and overall, in designing LTD_4 antagonists").

NLC has defined a POSITA in this case as "an electrophysiologist or an engineer familiar with the anatomy of the coronary sinus in a normal heart, and familiar with the

procedures and existing equipment used to conduct those procedures." To be considered a POSITA, according to NLC, an "engineer would have to have been familiar with the anatomy of the coronary sinus of a normal heart, as understood at the time, as well as with the then existing procedures conducted within the coronary sinus by electrophysiologists." But NLC attacks Dr. Erdman's qualifications based on his inability to implant or direct a physician to implant a permanent pacing lead into the coronary sinus and based on the fact that he is not a medical doctor. In doing so, NLC fails to demonstrate how Dr. Erdman's qualifications do not permit him to serve as a POSITA in this instance. Contrary to NLC's position, Dr. Erdman's credentials qualify him as a technical expert who can opine on factual matters that require the perspective of one of ordinary skill in the art under NLC's POSITA definition—which includes expertise as "an engineer"—and as generally defined. Moreover, there is an adequate relationship between the claimed invention, a catheter delivery system, and Dr. Erdman's experience, which includes catheter design. NLC identifies no evidence that, as a biomedical engineer, Dr. Erdman is not qualified in the relevant art.

Equally unpersuasive are NLC's arguments that Dr. Erdman's testimony must be excluded because he is not a medical doctor, that he has never implanted a permanent pacing lead, and that he has never personally witnessed an electrophysiologist implant a permanent pacing lead in the coronary sinus. The record demonstrates that St. Jude does not rely on Dr. Erdman's experience with the placement *procedure* to establish him as an expert. Instead, Dr. Erdman's testimony relates to "specific aspects of the *properties of the materials* required to perform claim 11" of the '268 Patent. (Emphasis added.) These

material properties include the "physical strength and support capabilities of various components of the dual catheter system at issue relative to the specific sequence of steps recited in claim 11." Based on Dr. Erdman's education and experience in the fields of mechanical and biomedical engineering and his specific experiences related to catheter design, there is an adequate relationship between Dr. Erdman's experience and the claimed invention. Dr. Erdman applies that expertise to the facts of this case by examining the method described in Claim 11. NLC identifies no evidence to the contrary, nor does NLC argue that Dr. Erdman's background is unrelated to catheter delivery design.

NLC's attack on Dr. Erdman's experience with the catheters and leads involved in the procedure offers insufficient grounds to exclude Dr. Erdman, especially when Dr. Erdman's credentials, knowledge, skill, and training are considered. *See Robinson*, 447 F.3d at 1100 (an expert must merely possess "knowledge, skill, experience training or education sufficient to assist the trier of fact" that matches his or her proffered opinions (internal quotation marks omitted)). NLC identifies no other basis on which to exclude Dr. Erdman's testimony as NLC does not challenge the *substance* of Dr. Erdman's opinions. Dr. Erdman's testimony must be useful to the factfinder, based on sufficient facts or data, the product of reliable principles, and the result of reliable application of those principals and methods to the facts of the case. Fed. R. Evid. 702. NLC has not challenged Dr. Erdman on any of these grounds. To the extent NLC seeks to challenge the factual basis for Dr. Erdman's opinions or any purported gaps between

Dr. Erdman's expertise and the proffered testimony, NLC may do so on cross-examination.

In summary, because NLC's challenge to Dr. Erdman's qualifications lacks merit, NLC's motion to exclude Dr. Erdman's opinions and testimony is denied.

II. St. Jude's Motion to Exclude Expert Testimony of Dr. Burke

St. Jude moves to exclude the opinions of NLC's technical expert Dr. Burke as unsupported by sufficient facts and counter to the law and the facts of the case because Dr. Burke's opinions do not comport with this Court's October 21, 2019 claim construction order. NLC argues that Dr. Burke's misunderstanding of the difference between direct and indirect infringement is not a basis on which Dr. Burke can be disqualified. The fact that Dr. Burke did not read the Court's claim construction order is not a basis for disqualification, NLC contends. Moreover, NLC maintains, Dr. Burke applied the Court's claim construction as to the order in which Claim 11 must be performed as well as the claim construction of "the catheter." The Court addresses each proffered basis for exclusion in turn.

A. Dr. Burke's Understanding of Direct and Indirect Infringement

The opinions of Dr. Burke should be excluded, St. Jude argues, because Dr. Burke demonstrated that he does not understand the difference between direct and indirect infringement. Testimony proffered by a witness who lacks the relevant *technical* expertise does not meet the standard of admissibility under Rule 702. *Sundance, Inc.*, 550 F.3d at 1363. But a challenge to an infringement expert's expertise in *patent law* may not undermine the expert's qualifications and testimony in the area of expertise in

which the expert is offered. *See, e.g.*, *WNS Holdings, LLC v. United Parcel Serv., Inc.*, No. 08-CV-275-bbc, 2009 WL 2136961, at *4 (W.D. Wis. July 14, 2009) ("Plaintiff's challenges to Cotton's lack of expertise in patent law do not undermine Cotton's qualifications and testimony as an avionics expert."), *aff'd*, 368 F. App'x 144 (Fed. Cir. 2010). "Experts routinely rely upon other experts hired by the party they represent for expertise outside their field." *Carnegie Mellon Univ. v. Marvell Tech. Grp., Ltd.*, 807 F.3d 1283, 1303 (Fed. Cir. 2015) (internal quotation marks omitted).

NLC offers Dr. Burke as an expert in electrophysiology to opine on the medical procedure for implanting permanent pacing leads into the coronary sinus. The parties do not dispute Dr. Burke's technical qualifications as St. Jude does not challenge Dr. Burke's knowledge, skill, or expertise as they relate to the method and devices at issue. Instead, St. Jude challenges Dr. Burke's ability to explain and understand the difference between direct and indirect infringement. But NLC does not offer Dr. Burke as an expert on patent law. And such a challenge is meritless when an expert witness's relevant expertise lies outside of the law. *See, e.g.*, *WNS Holdings, LLC*, 2009 WL 2136961, at *4. St. Jude cites no case law, nor has the Court's research produced any, that suggests that a technical expert *must* be capable of reciting the difference between direct and indirect infringement or that such an inability is an appropriate basis for exclusion.

Therefore, the Court denies St. Jude's motion to exclude Dr. Burke's opinions and testimony on this basis.

B. Dr. Burke's Review of the Court's Claim Construction Order

St. Jude also argues that the opinions of Dr. Burke should be excluded because Dr. Burke did not read the Court's claim construction order.

"An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed." Fed. R. Evid. 703. In the patent-infringement context, an expert's opinion has sufficient foundation when the expert has examined the accused method, the patented method, and the court's claim construction order, which are "the items most germane to forming an infringement opinion." *LTJ Enters. v. Custom Mktg. Co.*, 168 F. Supp. 3d 1202, 1209 (D. Minn. 2016). An expert may use the Court's definitions in its claim construction order, as relayed by counsel, when forming an expert opinion. *Arason Enters., Inc. v. CabinetBed Inc.*, No. 16-cv-03001-PAB-NRN, 2019 WL 4597863, at *4. (D. Colo. Sept. 23, 2019) (refusing to disqualify an expert because the expert did not read the court's claim construction in full and instead relied on the court's constructions as provided by counsel).

In this instance, St. Jude attacks Dr. Burke's expert opinion based on Dr. Burke's failure to personally read the Court's claim construction order. NLC represents that Dr. Burke "understood from counsel that the Court had interpreted Claim 11 to require that the steps be performed in order," and Dr. Burke affirms as much in his declaration and in his rebuttal opinion on validity. Although Dr. Burke did not read the Court's claim construction order, the claim construction was communicated to him through counsel. At worst, Dr. Burke may have lacked the context provided by preforming an independent reading of the Court's claim construction order. But St. Jude fails to offer any argument

or legal authority as to the adverse effect of this manner of preparation on the admissibility of Dr. Burke's opinions.

Accordingly, the Court declines to exclude Dr. Burke's opinions and testimony on this basis.

C. Dr. Burke's Application of the Court's Claim Construction Order

St. Jude next challenges the admissibility of Dr. Burke's opinions on the ground that he did not apply the Court's construction of Claim 11.

Expert testimony that is unsupported by sufficient facts or contrary to the facts of a case is inadmissible. *Marmo v. Tyson Fresh Meats, Inc.*, 457 F.3d 748, 757 (8th Cir. 2006). "Once a district court has construed the relevant claim terms" in a patent, "that legal determination governs." *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1321 (Fed. Cir. 2009). Expert testimony that conflicts with a district court's claim construction is inadmissible. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) (discussing with approval the district court's decision to exclude expert testimony that "attempted to resurrect a claim construction that the district court already rejected"). Likewise, expert testimony that ignores or fails to consider a district court's claim construction is inadmissible. *See, e.g.*, *MarcTec, LLC v. Johnson & Johnson*, 664 F.3d 907, 913 (Fed. Cir. 2012) (discussing exclusion of expert testimony that "ignored the court's claim construction" as "inadmissible under *Daubert*"). But expert testimony that merely is contradictory to prior testimony may be subject to cross-examination, not exclusion under *Daubert* or Rule 702. *In re AndroGel Antitrust Litig. (No. II)*, 888 F. Supp. 2d 1336, 1356 (N.D. Ga. 2012) (concluding that any inconsistency

between expert's deposition testimony and expert report "may be the subject of cross examination, but does not justify exclusion").

Dr. Burke's disputed opinion relates to the order in which Claim 11 must be performed. The Court's October 21, 2019 claim construction order concluded that the steps of Claim 11 must be performed in the order listed and that "Claim 11 is infringed *only* when the steps are performed in the order listed." (Emphasis added.) St. Jude points to several admissions made by Dr. Burke during his deposition regarding his application of the claim construction order. For example, Dr. Burke admitted that he applied the steps out of the sequence detailed in Claim 11 and that such an application may give rise to infringement. In addition, Dr. Burke marked an illustration during his deposition in a manner that suggests he applied the steps of Claim 11 out of sequence when rendering his infringement opinion.

Although testimony based on Dr. Burke's decision to apply the steps of Claim 11 out of order would be of little use to the jury because the question of infringement relates to completion of the steps of Claim 11 *in order*, a fulsome view of Dr. Burke's expert report and deposition testimony provides no grounds for his exclusion. Contradictory expert testimony is grounds for cross-examination, not exclusion. *Janopoulos v. Harvey L. Walner & Assocs., Ltd.*, 866 F. Supp. 1086, 1096 (N.D. Ill. 1994) ("[D]iscrepancies in [an expert's] testimony and declaration go to the weight rather than the admissibility of his opinions."). And deposition testimony that contradicts an expert report bears on the weight afforded the expert report, not on whether the expert should be precluded from testifying. *See, e.g., i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir.

2010) ("When the methodology is sound, and the evidence relied upon [is] sufficiently related to the case at hand, disputes about the degree of relevance or accuracy (above this minimum threshold) may go to the testimony's weight, but not its admissibility.").

St. Jude identifies numerous instances in which Dr. Burke contradicts *himself*, arguing that, because these internal inconsistences contradict this Court's claim construction order, Dr. Burke should be excluded. But Dr. Burke applied the Court's claim construction. Contrary to St. Jude's representations, during his deposition, Dr. Burke testified as follows:

> Q. And so what I'd like to know on behalf of St. Jude then is when you were assessing whether they infringed or not, would the presence of additional steps within claim 11, meaning you performed all of the steps listed in claim 11, but there were other steps done in between, would fall within the scope of infringement or noninfringement, as you applied the standard in this case?
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> . . .
>
> A. Yea, I generally, as I understand it, relate it to the scope of my testimony as it relates to St. Jude infringing, *that they have to follow these steps.*

(Emphasis added). This exchange suggests that Dr. Burke was aware that the steps in Claim 11 must be followed in the order listed to give rise to infringement. And at other points in his deposition and expert reports, Dr. Burke acknowledges that the steps in Claim 11 must be completed in the order listed.

For example, St. Jude contends that Dr. Burke was presented with the St. Jude Instructions for Use (IFU) at his deposition and asked to identify the presence of each

step in Claim 11 in the sequence each step appeared in the IFU. In response, Dr. Burke identified and marked the steps out of sequential order as 4, 3, 2, and 1, in a manner that is contrary to the Court's claim construction order. Dr. Burke's testimony is inconsistent with his expert report in which he tracks each claim element in sequential order alongside St. Jude's product literature instructions in sequential order, as is required by the Court's claim construction order. Such inconsistencies between an expert report and deposition testimony are not a basis for exclusion. *See, e.g.*, *i4i Ltd. P'ship*, 598 F.3d at 852.

The evidence identified by St. Jude does not constitute grounds to exclude Dr. Burke. At best, St. Jude has identified inconsistent or contradictory positions between Dr. Burke's expert reports and Dr. Burke's deposition testimony. Such inconsistences are matters for cross-examination, not grounds for exclusion. Accordingly, the Court denies St. Jude's motion to exclude Dr. Burke's opinions and testimony on this basis.

D. Dr. Burke's Application of the Court's Construction of "the catheter"

St. Jude also argues that Dr. Burke's opinions should be excluded because he did not apply the Court's construction of "the catheter."

When a district court has construed the relevant claim terms, that legal determination governs. *Exergen Corp.*, 575 F.3d at 1321. A party may not contradict a district court's claim construction. *Id*. And an expert witness may not present testimony that conflicts with the district court's claim construction. *See Finjan*, 626 F.3d at 1207. Expert testimony that ignores or fails to consider the district court's claim construction is inadmissible. *See, e.g.*, *MarcTec, LLC*, 664 F.3d at 913.

In the Court's October 21, 2019 claim construction order, the Court construed "the catheter" to mean "the double catheter." Claim 11 defines "double catheter" to include an "outer catheter and an inner catheter." St. Jude relies on several admissions by Dr. Burke during his deposition pertaining to his application of the Court's construction of "the catheter." Dr. Burke was questioned during his deposition about the definition of "the catheter" and whether, in his application of Claim 11, "the catheter" referred to a "single catheter, the inner and the outer catheter, or any version." In response, Dr. Burke testified that in his application of Claim 11, "the catheter" pertained to "any version." St. Jude now argues that this testimony renders Dr. Burke's opinion unreliable because he did not apply the Court's construction of "the catheter."

Although it is true that failure to apply the Court's claim construction of "the catheter" is impermissible, a fulsome view of Dr. Burke's expert report and deposition testimony suggests that exclusion of his opinions and testimony is unwarranted on this basis. Dr. Burke was questioned about whether following the steps of Claim 11 with the use of an electrophysiology catheter before completion of the final step of Claim 11 would constitute infringement. In response, Dr. Burke testified that he "would stick to the concept that claim 11 is a method for placing an electrical lead in a lateral branch of a coronary sinus vein *using a catheter, including an outer and inner cath[eter]*." (Emphasis added). Dr. Burke also was questioned about whether use of the stylet method would result in infringement. Dr. Burke responded that "with . . . a dual outer and inner sheath system that has engaged the branch using a guidewire, you can infringe using the stylet method." In each response, Dr. Burke explicitly refers to the double catheter

whether by referring to the component parts comprising the double catheter or by referring to the catheter and the component parts.

Moreover, it appears from Dr. Burke's expert report that he applied the Court's construction of "the catheter." Notably, in addressing steps 1 and 2 of Claim 11, Dr. Burke opines that "[t]he instructions for the CPS inner catheters . . . direct the electrophysiologist to insert the inner and other catheter into the coronary sinus" and that "St. Jude's instructions for the inner [catheter] direct an electrophysiologist to advance a guide wire through the inner and outer catheters." In addressing step 3 of Claim 11, Dr. Burke opines that "[t]his step describes using the double catheter in a telescoping manner," and that "St. Jude's instructions for the inner catheter explicitly direct electrophysiologists to use the inner and outer catheters . . . , which an electrophysiologists would understand as advancing the inner catheter out of the front of the outer catheter along the guide wire." Dr. Burke refers to the double catheter by identifying the double catheter's component parts, namely, an inner and outer catheter. This aspect of Dr. Burke's report is consistent with the Court's claim construction.

Accordingly, because Dr. Burke's expert report is consistent with this Court's claim construction order, his opinions and testimony will not be excluded.[2]

III. St. Jude's Motion to Exclude Expert Testimony of Carlson

St. Jude also moves to exclude the opinions of Carlson, NLC's damages expert, as unreliable and speculative. In particular, St. Jude challenges Carlson's damages opinions

[2] Should Dr. Burke attempt to testify at trial in a manner that is contrary to the Court's claim construction, the Court will address any objection. That is not the Court's expectation, however.

that pertain to the appropriate royalty base, arguing that Carlson fails to apportion damages to the value attributable to the claimed method and improperly assumes that all of St. Jude's inner catheters are used in an infringing manner.[3]

Reasonable royalty damages are, by statute, "the minimum amount of infringement damages 'adequate to compensate for the infringement.' " *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 66 (Fed. Cir. 2012) (quoting 35 U.S.C. § 284). Generally, reasonable royalties must "be based not on the entire product, but instead on the smallest salable patent-practicing unit." *Id.* at 67 (internal quotation marks omitted). As a "narrow exception" to this general rule, the "entire market value rule" permits a patentee to recover a royalty based on the revenue for an entire multi-component product if the patentee can show that "the patented feature drives the demand for [the] entire multi-component product." *Id.*

NLC concedes in its brief that "[t]his is not an entire market value rule case." Indeed, Carlson does not purport to invoke the entire-market-value rule in his report, nor does he attempt to establish a relationship between the claimed method and customer demand for any combination of St. Jude's products. To the contrary, Carlson observes in

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[3] St. Jude seeks exclusion of Carlson's opinions and testimony in their entirety, but St. Jude's arguments are directed solely at Carlson's opinions as to the royalty base. For instance, although St. Jude's reply brief repeatedly refers to Carlson's calculation of the royalty rate as "inflated," St. Jude offers no substantive factual or legal argument that specifically challenges Carlson's calculation of the royalty rate. As such, the Court limits its analysis to whether Carlson's royalty base opinions and testimony should be excluded. *See, e.g.*, *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1328–31 (Fed. Cir. 2014) (separately evaluating admissibility of expert opinions pertaining to royalty base and royalty rate, and concluding that the former were inadmissible whereas the latter were admissible).

his report that Claim 11 of the '268 Patent requires "an outer catheter, an inner catheter, a guide wire, and a lead," and that "these components comprise the smallest saleable component that is used by an electrophysiologist to practice the claimed methods." As such, Carlson derives a royalty base from this purported "smallest saleable" patent-practicing unit based on St. Jude's revenues for these four components.

When, as here, the entire-market-value rule is not implicated, "principles of apportionment apply." *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014). Because damages awarded for patent infringement "must reflect the value attributable to the infringing features of the product, and no more," apportionment requires a damages expert to "separate the value of the allegedly infringing features from the value of all other features." *Commonwealth Sci. & Indus. Rsch. Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301 (Fed. Cir. 2015) (internal quotation marks omitted). Apportionment may be addressed in numerous ways, including "by careful selection of the royalty base to reflect the value added by the patented feature [or] . . . by adjustment of the royalty rate so as to discount the value of a product's non-patented features; or by a combination thereof." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014). The parties do not dispute that apportionment is required in this case. Instead, the parties dispute whether Carlson reliably applied apportionment when calculating the royalty base.

NLC contends that "Carlson has appropriately apportioned the royalty base by limiting the royalty base to sales of the components recited in the claim." These components, according to Carlson's report, comprise the smallest salable patent-

practicing unit. But "the requirement that a patentee identify damages associated with the smallest salable patent-practicing unit is simply a step toward meeting the requirement of apportionment." *VirnetX*, 767 F.3d at 1327. When "the smallest salable unit is, in fact, a multi-component product containing several non-infringing features with no relation to the patented feature . . . , the patentee must do more to estimate what portion of the value of that product is attributable to the patented technology." *Id.* Although "this process may involve some degree of approximation" as "absolute precision" is not required, a district court must "exercise[ ] its gatekeeping authority to ensure that only theories comporting with settled principles of apportionment [are] allowed to reach the jury." *Id.* at 1328. Accordingly, "a patentee must be reasonable (though may be approximate) when seeking to identify a patent-practicing unit, tangible or intangible, with a close relation to the patented feature." *Id.* at 1329. The record reflects that Carlson has not done so here.

In his report, Carlson concludes that the "smallest saleable" patent-practicing unit comprises "an outer catheter, an inner catheter, a guide wire, and a lead," because these four components are recited in Claim 11 of the '268 Patent. But NLC has identified no legal authority for satisfying the apportionment requirement in this way. Indeed, courts have rejected such an approach. *See, e.g.*, *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1310, 1338 (Fed. Cir. 2009) (observing that expert's use of "the price of the entire computer as a royalty base" for a method claim was improper, even though a computer was recited in the claim language); *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283–85 (N.D.N.Y. 2009) (same). Even if a component is "valuable, important,

or even essential" to practicing a patented method, "the patented feature must be separated" from the unpatented elements of the component. *VirnetX*, 767 F.3d at 1329 (quoting *LaserDynamics*, 694 F.3d at 68). An expert's testimony as to a royalty base is inadmissible if the expert "fail[s] to apportion value between the patented features and the vast number of non-patented features contained in the accused products" because such an approach does not "carefully tie proof of damages to the claimed invention's footprint in the marketplace." *Id.* at 1329 (internal quotation marks omitted).

Claim 11 of the '268 Patent pertains to a "method for placing an electrical lead in a lateral branch of a coronary sinus vein using a double catheter." Claim 11 covers a method, not the components involved in practicing the method. Carlson did not even attempt to identify, let alone subtract, the value of any unpatented aspects of the four components that comprise his definition of the royalty base. For instance, although leads are recited in Claim 11, the '268 Patent does not teach or disclose leads. The parties' experts do not dispute this fact. Dr. Burke, NLC's technical expert, testified that the '268 Patent provides no discussion of how to accomplish the electrical features of a lead and that the leads "weren't part and parcel to the '268 Patent." The entirety of the '268 Patent's scope is limited to a "double catheter" for use in the "coronary sinus." This scope does not include leads. As such, Carlson's royalty base accounts for more than the *method* claimed. *See Cornell Univ.*, 609 F. Supp. 2d at 283–84 (excluding damages expert because the damages assessment was "in excess of the contribution of the claimed invention to this market"); *see also LaserDynamics*, 694 F.3d at 68 (rejecting damages award because the patent only covered a method practiced using an optical disc drive, but

damages were based on the entire computer). As in *VirnetX*, in this case, Carlson failed to apportion value between the claimed method and any other valuable features contained in the accused products. *See* 767 F.3d at 1329. In doing so, Carlson essentially opines that St. Jude's inner catheter, outer catheter, guide wire, and leads have no value other than to perform the claimed method. But the record does not support such a conclusion. Even NLC's technical expert, Dr. Burke, has testified that a lead is a "very complex" component with features that are not part of the claimed invention.

NLC contends that Carlson properly excluded "other devices involved in the medical procedure, such as pacemakers and defibrillators." But this fact does not excuse NLC from its obligation to apportion value with respect to the four components that comprise Carlson's royalty base. *See id.* at 1327 (explaining that when "the smallest salable unit is, in fact, a multi-component product containing several non-infringing features with no relation to the patented feature . . . , the patentee must do more to estimate what portion of the value of that product is attributable to the patented technology"). Even assuming that the four components Carlson used to calculate the royalty base represent the smallest salable patent-practicing unit, identifying the damages associated with these components "is simply a step toward meeting the requirement of apportionment," and is not sufficient on its own. *Id.*

NLC also contends that "Carlson used the inner catheter sales as a limiter to apportion the unit sales of outer catheters and leads." Carlson opines that, in a given year, St. Jude's gross profit margin for inner catheters has ranged from approximately 60 percent to 70 percent, St. Jude's gross profit margin for outer catheters has ranged from

approximately 83 percent to 86 percent, and St. Jude's gross profit margin for leads has ranged from approximately 82 percent to 89 percent. To calculate the royalty base, Carlson limits the number of outer catheters and leads by using the number of inner catheter sales for the same year because, according to Carlson, St. Jude's inner catheters had the lowest number of per-unit sales. But although this methodology reduces the overall royalty base, this reduction has no logical connection to the proportionate value of these components that is attributable to the claimed method of the '268 Patent. The purpose of apportionment is to ensure that a reasonable royalty damages award is "based on the incremental value that the patented invention adds to the end product." *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp, LLC*, 879 F.3d 1332, 1348 (Fed. Cir. 2018) (explaining that when a patent claim "recite[s] both conventional elements and unconventional elements, the court must determine how to account for the relative value of the patentee's invention in comparison to the value of the conventional elements recited in the claim, standing alone" (internal quotation marks omitted)). Carlson's reduction of the royalty base fails to do so here. Because Carlson's method *arbitrarily* reduces the royalty base for outer catheters and leads to match the per-unit sales of inner catheters, his method does not "carefully tie proof of damages to the claimed invention's footprint in the market place." *VirnetX*, 767 F.3d at 1329 (internal quotation marks omitted).

It is true that, rather than addressing apportionment when calculating the royalty *base*, an expert may instead address apportionment by adjusting of the royalty *rate* "so as to discount the value of the product's non-patented features." *Exmark*, 879 F.3d at 1348

(internal quotation marks omitted). But NLC does not argue, and the record does not reflect, that Carlson used such an approach here. To the contrary, when addressing the royalty rate calculation in his report, Carlson opines that the "portion of the realizable profit that should be credited to the invention supports a higher royalty rate." According to Carlson, this is because "the claimed invention is not divorceable from St. Jude's catheters" and "the patent encompasses the entire product, not merely some component of the product." As such, Carlson's calculation of the royalty rate expressly does *not* discount the value of the non-patented features of an inner catheter, outer catheter, guide wire, or lead—instead, Carlson concludes that no such value exists.

For these reasons, Carlson's calculation of the royalty base does not comport with settled principles of apportionment and, therefore, must be excluded. *VirnetX*, 767 F.3d at 1328. Accordingly, St. Jude's motion to exclude Carlson's opinions and testimony is granted in part. Carlson's opinions and testimony as to the royalty base are inadmissible.

IV. St. Jude's Request for Reconsideration

St. Jude requests that the Court reconsider its ruling on its construction of "the catheter" because of "the clear confusion expressed by NLC's own expert ***even after*** this Court's claim construction ruling." In support of its motion, St. Jude explains that "the ambiguity caused by the claim's failure to provide an antecedent basis for 'the catheter' injects confusion and allows gamesmanship as to which catheter is referenced, and where infringement begins and ends."

"Except with the court's prior permission, a party must not file a motion to reconsider. . . . A party who seeks permission to file a motion to reconsider must first file

and serve a letter of no more than two pages requesting such permission." LR 7.1(j). To the extent that St. Jude requests that the Court reconsider its prior ruling, that motion is not properly before the Court because St. Jude neither sought nor received permission from this Court before requesting reconsideration. Accordingly, St. Jude's request for reconsideration is denied.

ORDER

Based on the foregoing analysis and all the files, records and proceedings herein, **IT IS HEREBY ORDERED**:

1. Plaintiff Niazi Licensing Corporation's motion to exclude the expert testimony of Dr. Arthur Erdman, (Dkt. 196), is **DENIED**.

2. Defendant St. Jude Medical S.C., Inc.'s motion to exclude the expert testimony of Dr. Martin Burke and Brad Carlson, (Dkt. 164), is **GRANTED IN PART AND DENIED IN PART** as follows:

   a. St. Jude's motion is **GRANTED** as to the opinions and testimony of Carlson that pertain to the royalty base, which are excluded as addressed in Part III of this Order.

   b. St. Jude's motion is **DENIED** in all other respects.

Dated: September 14, 2020

s/Wilhelmina M. Wright
Wilhelmina M. Wright
United States District Judge